IN THE CLAIMS

Please amend the claims as follows.

1. (Currently Amended) A method comprising:

tracking packet sequence numbers of request packets and response packets of transactions transferring data to or from a network interface, said method including,

for every request packet transmitted by the network interface,

writing the packet sequence number to a location in a circular send queue pointed to by a write pointer and setting a valid bit at said location, wherein the valid bit is indicative of whether at least one response is expected;

incrementing the write pointer if the packet is a read request packet or clearing a read indicator at the location in the circular send queue pointed to by the write pointer if the packet is not a read request packet; and

for every response packet received by the network interface,

checking the packet sequence number of the response packet against the packet sequence number stored at a location in the circular send queue pointed to by the read pointer of the circular send queue;

wherein a response packet is accepted if the valid bit at the location in the circular send queue pointed to by the read pointer is set and the packet sequence number of the response packet is both equal to or less than the packet sequence number written at the location in the circular send queue pointed to by the read pointer and greater than the last acknowledged packet sequence number, and

wherein, if the response packet is a read response packet, it is accepted if the packet sequence number of the read response packet is equal to the packet sequence number written at the location in the circular send queue pointed to by the read pointer and the read indicator is set.

2. (Original) The method recited in claim 1, wherein a response packet is dropped if the valid bit at the location in the circular send queue pointed to by the read pointer is not set.

3-4. (Canceled)

5. (Currently Amended) The method recited in claim [[3]] 1, wherein, if a response packet is accepted, the valid bit at the location in the circular queue pointed to by the read pointer is cleared and, if the response packet is a read response packet, the read pointer is incremented.

6. (Original) The method recited in claim 1, further comprising:

for every request packet received in the network interface,

writing the packet sequence number to a location in a circular receive queue pointed to by a write pointer and setting a valid bit at the location in the circular receive queue pointed to by the write pointer;

if the request packet is a read request packet, then setting the read bit at the location in the circular receive queue pointed to by the write pointer and incrementing the write pointer;

if the request packet is not a read request packet, then clearing the read bit at the location in the circular receive queue pointed to by the write pointer; and

reading the packet sequence number and valid bit at a location pointed to by the read pointer of the circular receive queue.

7. (Original) The method recited in claim 6, wherein a response packet is transmitted if the valid bit at the location pointed to by the read pointer of the circular receive queue is set.

8. (Original) The method recited in claim 7, wherein a read response packet is transmitted if the read bit at the location pointed to by the read pointer of the circular receive queue is set.

9. (Original) The method recited in claim 7, wherein the valid bit at the location of the circular receive queue pointed to by the read pointer is cleared and, if the response packet is a read response packet, the read pointer is incremented after the response packet is transmitted.

10. (Currently Amended) A computer program stored in a memory on a network interface, said program, when executed, causing said network interface to carry out a method comprising:

tracking packet sequence numbers of request packets and response packets of transactions transferring data to or from said network interface, said method including,

for every request packet transmitted by the network interface,

writing the packet sequence number to a location in a circular send queue pointed to by a write pointer and setting a valid bit at said location, wherein the valid bit is indicative of whether at least one response is expected;

incrementing the write pointer if the packet is a read request packet or clearing a read indicator at the location in the circular send queue pointed to by the write pointer if the packet is not a read request packet; and

for every response packet received by the network interface,

checking the packet sequence number of the response packet against the packet sequence number stored at a location in the circular send queue pointed to by the read pointer of the circular send queue;

wherein a response packet is accepted if the valid bit at the location in the circular send queue pointed to by the read pointer is set and the packet sequence number of the response packet is both equal to or less than the packet sequence number written at the location in the circular send queue pointed to by the read pointer and greater than the last acknowledged packet sequence number, and

wherein, if the response packet is a read response packet, it is accepted if the packet sequence number of the read response packet is equal to the packet sequence number written at the location in the circular send queue pointed to by the read pointer and the read indicator is set.

11. (Original) The computer program recited in claim 10, wherein a response packet is dropped if the valid bit at the location in the circular send queue pointed to by the read pointer is not set.

12-13. (Canceled)

14. (Currently Amended) The computer program recited in claim [[12]] 10, wherein, if a response packet is accepted, the valid bit at the location in the circular queue pointed to by the read pointer is cleared and, if the response packet is a read response packet, the read pointer is incremented.

15. (Original) The computer program recited in claim 10, further comprising:
for every request packet received in the network interface,
writing the packet sequence number to a location in a circular receive queue pointed to by a write pointer and setting a valid bit at the location in the circular receive queue pointed to by the write pointer;
if the request packet is a read request packet, then setting the read bit at the location in the circular receive queue pointed to by the write pointer and incrementing the write pointer;
if the request packet is not a read request packet, then clearing the read bit at the location in the circular receive queue pointed to by the write pointer; and
reading the packet sequence number and valid bit at a location pointed to by the read pointer of the circular receive queue.

16. (Original) The computer program recited in claim 15, wherein a response packet is transmitted if the valid bit at the location pointed to by the read pointer of the circular receive queue is set.

17. (Original) The computer program recited in claim 16, wherein a read response packet is transmitted if the read bit at the location pointed to by the read pointer of the circular receive queue is set.

18. (Original) The computer program recited in claim 16, wherein the valid bit at the location of the circular receive queue pointed to by the read pointer is cleared and, if the response is a read response, the read pointer is incremented after the response packet is transmitted.

19-24. (Canceled)